AMENDMENT TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of the Claims

Claims 1 - 84 (Canceled).

85. A twin-wire former for producing a fibrous web, such as a paper, board or tissue web, from a fibrous stock suspension, said twin-wire former comprising:

two endless wire belts arranged to form a twin-wire zone;

a dewatering element;

a flowbox positioned at an angle relative to an imaginary first horizontal plane;

said twin-wire zone comprising a first section in which said two wire belts are arranged to run over said dewatering element, and said two wire belts further being positioned to form a wedge-like inlet gap that is structured and arranged to receive a fibrous stock suspension directly from said flowbox;

additional dewatering elements;

said twin-wire zone comprising a second section in which said two wire belts along with the fibrous web forming between said two wire belts are arranged to run downward over said additional dewatering elements at an angle of 10° to 60° relative to an imaginary first vertical plane;

a first deflection device having a lower vertex;

at least one separating device that acts over a machine width;

at an end of said second section, said two wire belts are arranged to run over said lower vertex of said first deflection device and then over said at least one separating device;

in a region of said at least one separating element, one of said two wires belts arranged to be led away from the forming fibrous web and the other of said two wire belts;

a second deflection device having an upper vertex being positioned after said separating device and structured and arranged to deflect said other wire belt that carries the forming fibrous web; and

after said first deflection device, said two wire belts are arranged to run upward at an angle relative to an imaginary second horizontal plane such that said upper vertex of said second deflection device is located above said lower vertex of said first deflection device.

86. The twin-wire former in accordance with claim 85, wherein said flowbox is positioned at an angle oriented downward relative to the imaginary first horizontal plane.

87. The twin-wire former in accordance with claim 85, wherein said dewatering element is composed of a rotating forming roll.

88. The twin-wire former in accordance with claim 85, wherein said upper vertex of said second deflection device is located at least 50 mm above said lower vertex of said first deflection device.

89. The twin-wire former in accordance with claim 88, wherein said upper vertex is located at least 100 mm above said lower vertex.

90. The twin-wire former in accordance with claim 88, wherein said upper vertex is located at least 200 mm above said lower vertex.

91. The twin-wire former in accordance with claim 85, wherein the angle at which said flowbox is positioned is between 0° and 45°.

92. The twin-wire former in accordance with claim 91, wherein the angle at which the flowbox is positioned is between 0° and 30°.

93. The twin-wire former in accordance with claim 85, further comprising:

a felt positioned at a pickup point located above said lower vertex of said first deflection that is structured and arranged to remove the forming fibrous web from said other wire belt

a press unit positioned after said pickup point, said press unit comprising a first nip formed by a first press roll and a second press roll, such that the forming fibrous web is guided through said first press nip;

after the first press nip, said press unit is further structured to guide the forming fibrous web around said first press roll and then to transfer the forming fibrous web to a non-felted press roll in a second press nip and then through at least one further single-side-felted press nip.

94. The twin-wire former in accordance with claim 93, wherein said first nip is a double felted press nip, and one of said felts is arranged to guide the forming fibrous web over said first press roll.

95. The twin-wire former in accordance with claim 93, wherein said pickup point is located at least 50 mm above said lower vertex of said the first deflection device.

96. The twin-wire former in accordance with claim 95, wherein said pickup point is located at least 100 mm above said lower vertex.

97. The twin-wire former in accordance with claim 85, wherein said pickup point is located at least 200 mm above said lower vertex.

98. The twin-wire former in accordance with claim 85, wherein the angle at which said two wire belts run upward in relation to the imaginary second horizontal plane after said first deflection device is between 10° and 90°.

99. The twin-wire former in accordance with claim 98, wherein the angle at which the two wire belts run upward after said first deflection device is between 25° and 40°.

100. The twin-wire former in accordance with claim 85, wherein said additional dewatering elements comprise isobaric dewatering elements, and said isobaric dewatering elements are arranged so that the forming fibrous web, which is enclosed between said two wire belts, are guided over said isobaric dewatering elements.

101. The twin-wire former in accordance with claim 100, wherein said isobaric

dewatering elements comprise at least one stationary isobaric dewatering element that is arranged on said one wire belt, and at least one isobaric dewatering element is arranged on said other wire belt and at least one of said isobaric dewatering elements is resiliently set against at least one of said wire belts by a selectable force.

102. The twin-wire former in accordance with claim 100, wherein said isobaric dewatering elements comprise plates or plate segments.

103. The twin-wire former in accordance with claim 85, further comprising at least one flat suction element arranged after said separating device, which acts on said wire belt carrying the forming fibrous web.

104. The twin-wire former in accordance with claim 85, wherein, at said second deflection device, deflection of said wire belt is carried out in such a way that said wire belt subsequently runs downward at an angle less than 60° relative to an imaginary second vertical plane.

105. The twin-wire former in accordance with claim 104, wherein, at said second deflection device, said wire subsequently runs downward at an angle less than 40° relative to the imaginary second vertical plane.

106. The twin-wire former in accordance with claim 104, wherein, at said second deflection device, said wire substantially runs downward at an angle less than 25°.

107. A twin-wire former for producing a fibrous web, such as a paper, board or tissue

web, from a fibrous stock suspension, said twin-wire former comprising:

two endless wire belts arranged to form a twin-wire zone;

a dewatering element;

a flowbox positioned at an angle relative to an imaginary first horizontal plane;

said twin-wire zone comprising a first section in which said two wire belts are arranged to run over said dewatering element, and said two wire belts further being positioned to form a wedge-like inlet gap that is structured and arranged to receive a fibrous stock suspension directly from said flowbox;

additional dewatering elements;

said twin-wire zone comprising a second section in which said two wire belts along with the fibrous web forming between said two wire belts are arranged to run downward over said additional dewatering elements at an angle of 10° to 60° relative to an imaginary first vertical plane;

a first deflection device having a lower vertex;

at least one separating device that acts over a machine width;

at an end of said second section, said two wire belts are arranged to run over said lower vertex of said first deflection device and then over said at least one separating device;

in a region of said at least one separating element, one of said two wires belts arranged to be led away from the forming fibrous web and the other of said two wire belts;

a second deflection device having an upper vertex being positioned after said separating device and structured and arranged to deflect said other wire belt that carries the forming fibrous web; and

after said first deflection device, said two wire belts are arranged to run upward at an angle relative to an imaginary second horizontal plane such that said upper vertex of said second deflection device is located above said lower vertex of said first deflection device,

wherein, at said second deflection device, said other wire belt is arranged to be substantially horizontally guided.

108. The twin-wire former in accordance with claim 107, wherein said other wire belt is arranged to run over said lower vertex of said first deflection device.

109. The twin-wire former in accordance with claim 107, wherein said other wire belt is arranged to run at least 50 mm above said lower vertex of said first deflection device.

110. The twin-wire former in accordance with claim 109, wherein said other wire belt is arranged to run at least 100 mm above said lower vertex.

111. The twin-wire former in accordance with claim 85, further comprising a further sheet forming device arranged after said second deflection device.

112. The twin-wire former in accordance with claim 111, wherein said further sheet forming device comprises a hybrid former.

113. The twin-wire former in accordance with claim 85, wherein said second

deflection device comprises a suction roll or one of a shoe with foils or a shoe with foils and applied vacuum.

114. The twin-wire former in accordance with claim 85, wherein a distance between said lower vertex of said first deflection device and said upper vertex of said second deflection device is between 1 and 8 m.

115. The twin-wire former in accordance with claim 114, wherein the distance between the lower vertex and upper vertex is between 3 and 6 m.

116. The twin-wire former in accordance with claim 85, wherein said first deflection device comprises one of a closed roll, an open roll, and an open roll with an applied vacuum.

117. The twin-wire former in accordance with claim 85, wherein said separating device comprises at least one of a suction separator and a vacuum shoe.

118. The twin-wire former in accordance with claim 85, wherein said dewatering device comprises forming roll having a diameter greater than 1200 mm.

119. The twin-wire former in accordance with claim 118, wherein said forming roll has a diameter greater than 1635 mm.

120. The twin-wire former in accordance with claim 118, wherein said forming roll has a diameter greater than 1760 mm.

121. The twin-wire former in accordance with claim 118, wherein said forming roll has a dewatering capacity of at least 50% of the total dewatering capacity of the twin-wire

former.

122. The twin-wire former in accordance with claim 121, wherein the dewatering capacity of said forming roll is at least 65%.

123. The twin-wire former in accordance with claim 118, wherein said forming roll comprises an open forming roll.

124. The twin-wire former in accordance with claim 123, wherein said open forming roll is closed by one of a grill or honeycomb structure.

125. The twin-wire former in accordance with claim 123, wherein said open forming roll comprises a suction roll.

126. The twin-wire former in accordance with claim 123, wherein a roll diameter of said first deflection roll is greater than at least one of a roll diameter of said forming roll and of a roll diameter of said second deflection device.

127. The twin-wire former in accordance with claim 85, wherein an overall height of said twin-wire former is between 2 and 8 m.

128. The twin-wire former in accordance with claim 127, wherein said overall height is between 3 and 6 m.

129. A process of forming the fibrous web in the twin-wire former according to claim 85.

130. A process of dewatering a web in an apparatus that includes two endless wire

belts arranged to form a twin-wire zone having at least a first and second section, a first dewatering element located in the first section and the two endless wire belts being arranged to form a wedge-like inlet gap, a flowbox arranged at an angle to a horizontal reference in a vicinity of the inlet gap, a second dewatering element located in the second section, a first deflection device, located at an end of the second section, having a lower vertex, at least one separating device structured and arranged to act over an entire machine width, and a second deflection device located after the separating device, relative to a belt travel direction, said process comprising:

supplying a fibrous stock suspension into the inlet gap, whereby a forming fibrous web is located between the two endless wire belts;

guiding the forming fibrous web and the two endless wires over at least a portion of the first dewatering element;

guiding the forming fibrous web and the two endless wire belts obliquely downward, relative to a vertical reference, over the second dewatering element;

guiding the forming fibrous web and the two endless wire belts over the lower vertex of the first deflection device;

after the first deflection device, guiding the two endless wire belts to run upward at an angle to the horizontal reference, such that the lower vertex of the first deflection device is located below the upper vertex of the second deflection device;

separating a first of the two endless wire belts from a second endless wire belt carrying the forming fibrous web in a region of the separating device;

guiding the second endless wire belt carrying the forming fibrous web over the second deflection device.

131. The process in accordance with claim 130, wherein the apparatus further includes a felt and a press unit, and said process further comprises:

removing the forming fibrous web from the second endless wire belt with the felt at a pickup point located above the lower vertex; and

pressing the forming fibrous web in the press unit, arranged to follow the pickup point, relative to a belt travel direction, which includes a first and second press roll arranged to form a first press nip and third press roll arranged to form a second press nip, and a fourth press roll arranged to form a single side felted third press nip.